ShapeMetriX 3D 4.7 - Release Notes

*ShapeMetriX 3D 4.7* is a major release which offers new features for geologic mapping and assessment of the rock masses. It includes a completely new implemented mode *Guided Trace* for a semi-automatic annotation of lineaments directly on the 3D model. Image and graph processing algorithms provide the trace of the joint after clicking the start and end point and visualize the trace on the 3D model immediately. This feature supports a fast, effective and accurate mapping with a minimum effort of user interaction. Moreover, there is now an import of displacement data from radar systems (IDS GeoRadar) that offers the possibility to visualise geologic mapping data in conjunction with radar data. A real innovation that helps identifying the mechanism that causes the displacement.

General

- 3D navigation features using arrow key for a continuous zoom in the viewer
- Checkboxes for the visibility of 3D models in the viewer available in all software components

JMX Analyst

- **New!** Semi-automatic mode *Guided Trace* for annotating joint traces by simply defining the start and the endpoint on the 3D model with the computer mouse
- **New!** CSV 4D import of radar data (IDS GeoRadar) with a colour-coded visualisation of displacement directly on the 3D model
- **New!** Export of discontinuities in “.dx” format as polygon or mesh
- Feature for automatically adding discontinuity models to mapped areas and traces

JMX Inspector

- **New!** CSV 4D import and colour-coded visualisation of displacement data achieved from radar system IDS GeoRadar
ShapeMetriX UAV 4.3 - Release Notes

*ShapeMetriX 3D 4.3* is a major release which offers enhanced possibilities for geologic mapping and assessment of rock masses. Next to enhancements in *SMX MultiPhoto*, a new mode for volume estimations specially designed for underground applications is now available in the *SMX VolumeCalculator*. The *BMX Fragmenter* is available in dark theme design and has a new design with newly shaped icons. All improvements and new features mentioned in the *General* software, *JMX Analyst* and *JMX Inspector* are also included in the UAV package.

**SMX MultiPhoto**

- **New!** Generation of a 3D model with reduced data density (coarse 3D model)
- Export of the coarse 3D model as “.obj”
- Enhancement for confining the reconstruction area to a region of interest by providing the coarse 3D model in the viewer
- Configurable “.obj” export (point density, export of co-ordinates)

**SMX VolumeCalculator**

- **New!** Additional mode *Underground* to estimate volumes by the generation of a “watertight” mesh. The mode is specially designed for underground applications.
- Improved error analysis and warnings

**BMX Fragmenter**

- **New!** Available in dark theme mode
- Redesigned user interface with newly designed icons to fit both the original and the new dark theme design
- Features for enabling mouse navigation in the stereo view
- Specification of the total and analysed area in the report
- Improvements in editing particles